

## **Equine Preparation For Thermal Imaging**



## Dear Client:

In preparation for thermal imaging, we ask that subject horse is ready at the scheduled time in order to expedite imaging and to limit any standby time charges. Please follow these guidelines for maximum results of your horse's scan. Failure to follow these guidelines will influence the quality or ability to complete your horse's scan and interpretation. A handler must be present for positioning of the horse during imaging, preferably with an assistant as needed. A full scan is typically completed within 20-30 minutes with a diagnostic imaging report returned to client within 3-5 business days. Infrared imaging is non-invasive as well as completely safe for the animal. Thermal imaging reads radiant energy emitted by animal only and emits no harmful rays. Most imaging is scanned from a distance of 2-4 feet from the horse.

- The horse should be exercised approximately 15-20 minutes to increase blood flow and then normalized for a minimum of thirty minutes prior to the scan. NOTE: In cases where exercise could potentially damage the patient, or where Veterinarian recommendation is for strict rest, scanning will be done without prior exercise. In very cold weather longer exercise (20-30 minutes) may be needed to increase blood flow and imaging is done with a shorter acclimation period. In hot, humid weather, shorter exercise and a longer acclimation period may be needed.
- The horse should be <u>clean</u>, <u>dry (no sweat!)</u>, and settled in a stable or covered area <u>away from cold drafts</u>, <u>direct sun or</u> hot humid areas. Sun exposure, breezes, or moisture will inhibit proper imaging and interpretation!
- Imaging is best performed on a clean, dry, level area where the patient can stand squarely in comfort without footing obscuring the hooves. (Shavings, arena sand, rocks, etc. will impede imaging and cause artifacts)
- Long hair coats or natural feathers will impede imaging and should be clipped up, rubber banded up during exercise and imaging to eliminate additional artifacts in the poll and neck. Shavings, hay, dirt, gravel, etc. will obscure and can cause artifacts in the thermal imaging.
- If a scan is scheduled early in the morning, the horse should be towel dried (scraped) as needed after grooming. Again, the patient must be DRY and free of SWEAT to maximize imaging.
- Ice tubs should not be used within 24 hours of imaging.
- Leg protections (boots, wraps) and blankets should be removed at least 2 hours prior to scan.
- No applications of fly spray, liniments, ointments or solutions should be applied after the night before imaging for best results. (Note: Can create false readings in thermal imaging due to artifact)
- For full hoof imaging (included with service), any pads or shoes would need to be removed prior to our arrival. Hoof imaging can be done with shoes or pads, but it should be understood that the camera is limited by obstructions and shoes and pads will block full imaging of the soles. If hoof issues are of primary concern, it is recommended that the horse be barefoot for imaging.
- In order to eliminate any imaging artifacts due to horse perspiration, imaging should be done with outside ambient temperatures of 88 degrees or less however it is possible with higher temperatures depending on humidity.
- For saddle fit only, no exercise is needed prior however, other conditions should be met.

Infrared imaging is physiologic and therefore is a tool that will help visualize thermal (heat) patterns. Thermal symmetry is the rule--you compare one anatomic area with the same area on the other side (i.e., outside foreleg to outside foreleg). Changes of one degree Celsius over 25% of the comparable anatomic structure usually are clinically significant.

Thank you.